

ACT	TCT	TGA
<del>ATh</del>	Ser	

AAC	TGG	GTG	AAT	GTA	ATA	AGT	GAT	TTG	AAA	AAA	ATT	GAA	GAT	CTT	ATT
Asn	Trp	Val	Asn	Val	Ile	Ser	Asp	Leu	Lys	Lys	Ile	Glu	Asp	Leu	Ile
CAA	TCT	ATG	CAT	ATT	GAT	GCT	ACT	TTA	TAT	ACA	GAA	AGT	GAT	GTT	CAC
Gln	Ser	Met	His	Ile	Asp	Ala	Thr	Leu	Tyr	Thr	Glu	Ser	Asp	Val	His
CCC	AGT	TGC	AAG	GTA	ACA	GCA	ATG	AAG	TGC	TTT	CTC	TTG	GAG	TTG	CAA
Pro	Ser	Cys	Lys	Val	Thr	Ala	Met	Lys	Cys	Phe	Leu	Leu	Glu	Leu	Gln
GTT	ATT	TCA	CAT	GAG	TCC	GGA	GAT	ACA	GAT	ATT	CAT	GAT	ACA	GTA	GAA
Val	Ile	Ser	His	Glu	Ser	Gly	Asp	Thr	Asp	Ile	His	Asp	Thr	Val	Glu
AAT	CTT	ATC	ATC	CTA	GCA	AAC	AAC	ATC	TTG	TCT	TCT	AAT	GGG	AAT	ATA
Asn	Leu	Ile	Ile	Leu	Ala	Asn	Asn	Ile	Leu	Ser	Ser	Asn	Gly	Asn	Ile
ACA	GAA	TCT	GGA	TGC	AAA	GAA	TGT	GAG	GAA	CTA	GAG	GAA	AAA	AAT	ATT
Thr	Glu	Ser	Gly	Cys	Lys	Glu	Cys	Glu	Glu	Leu	Glu	Glu	Lys	Asn	Ile
AAA	GAA	TTT	TTG	CAG	AGT	TTT	GTA	CAT	ATT	GTC	CAA	ATG	TTC	ATC	AAC
Lys	Glu	Phe	Leu	Gln	Ser	Phe	Val	His	Ile	Val	Gln	Met	Phe	Ile	Asn

FIGURE 2

AAC	TGG	GTG	AAT	GTA	ATA	AGT	GAT	TTG	AAA	AAA	ATT	GAA	GAT	CTT	ATT
Asn	Trp	Val	Asn	Val	Ile	Ser	Asp	Leu	Lys	Lys	Ile	Glu	Asp	Leu	Ile
CAA	TCT	ATG	CAT	ATT	GAT	GCT	ACT	TTA	TAT	ACG	GAA	AGT	GAT	GTT	CAC
Gln	Ser	Met	His	Ile	Asp	Ala	Thr	Leu	Tyr	Thr	Glu	Ser	Asp	Val	His
CCC	AGT	TGC	AAA	GTA	ACA	GCA	ATG	AAG	TGC	TTT	CTC	TTG	GAG	TTA	CAA
Pro	Ser	Cys	Lys	Val	Thr	Ala	Met	Lys	Cys	Phe	Leu	Leu	Glu	Leu	Gln
GTT	ATT	TCA	CTT	GAG	TCC	GGA	GAT	GCA	AGT	ATT	CAT	GAT	ACA	GTA	GAA
Val	Ile	Ser	Leu	Glu	Ser	Gly	Asp	Ala	Ser	Ile	His	Asp	Thr	Val	Glu
AAT	CTG	ATC	ATC	CTA	GCA	AAC	AAC	AGT	TTG	TCT	TCT	AAT	GGG	AAT	GTA
Asn	Leu	Ile	Ile	Leu	Ala	Asn	Asn	Ser	Leu	Ser	Ser	Asn	Gly	Asn	Val
ACA	GAA	TCT	GGA	TGC	AAA	GAA	TGT	GAG	GAA	CTG	GAG	GAA	AAA	AAT	ATT
Thr	Glu	Ser	Gly	Cys	Lys	Glu	Cys	Glu	Glu	Leu	Glu	Glu	Lys	Asn	Ile
AAA	GAA	TTT	TTG	CAG	AGT	TTT	GTA	CAT	ATT	GTC	CAA	ATG	TTC	ATC	AAC
Lys	Glu	Phe	Leu	Gln	Ser	Phe	Val	His	Ile	Val	Gln	Met	Phe	Ile	Asn
ACT	TCT	TGA													
Thr	Ser														



FIGURE 3

CV-1/EBNA  
DMEM serum free  
bioreactors

HPLC C4 reverse phase (Vydac .46 X25 cm, 5u)  
0.1% TFA to 0.1% TFA/100% AcN, 1ml/min

0 to 45% AcN 1%/min  
45-60% AcN 0.5%/min  
60-100% AcN 2%/min

YM30 Spiral cartridge conc.

add ammonium sulfate  
HEPES pH 8.5

Phenyl Sepharose CL-4B  
0.2M ammonium sulfate  
20 mM HEPES pH 8.5  
elute with 10mM HEPES pH 8.5

add NaCl to 1.6 mS/cm

DEAE Sephacel  
10mM HEPES pH 8.5  
0.14 to 0.3 M NaCl gradient

dilute to 1.2 mS/cm

Mono Q  
10mM HEPES pH 8.5  
0.1 to 0.5 M NaCl gradient

HPLC C4 reverse phase (Vydac .46X25cm, 5u)  
0.1% TFA to 0.1% TFA/60% n-propanol  
0.5ml/min  
0.5%/min gradient

SDS PAGE 14%, reducing

PVDF

N-terminal protein sequence



[illegible]



FIGURE 5

```
1 MRISKPHLRSISIQCYCLCLLNSHFLTEAGIHVFILGCF SAGLPKTEANW 50
  |||||
1 MRISKPHLRSISIQCYCLCLLKSHFLTEAGIHVFILGCF SAGLPKTEANW 50
51 VNVISDLKKIEDLIQSMHIDATLYTESDVHPSCKVTAMKCFLELQVISL 100
  |||||
51 VNVISDLKKIEDLIQSMHIDATLYTESDVHPSCKVTAMKCFLELQVISL 100
101 ESGDASIHDTVENLIILANNSLSSNGNVTESGCKECELEEKNIKEFLQS 150
  |||||.|||||:|||||
101 ESGDTDIHDTVENLIILANNILSSNGNITESGCKECELEEKNIKEFLQS 150
151 FVHIVQMFINTS* 163
  |||||
151 FVHIVQMFINTS* 163
```

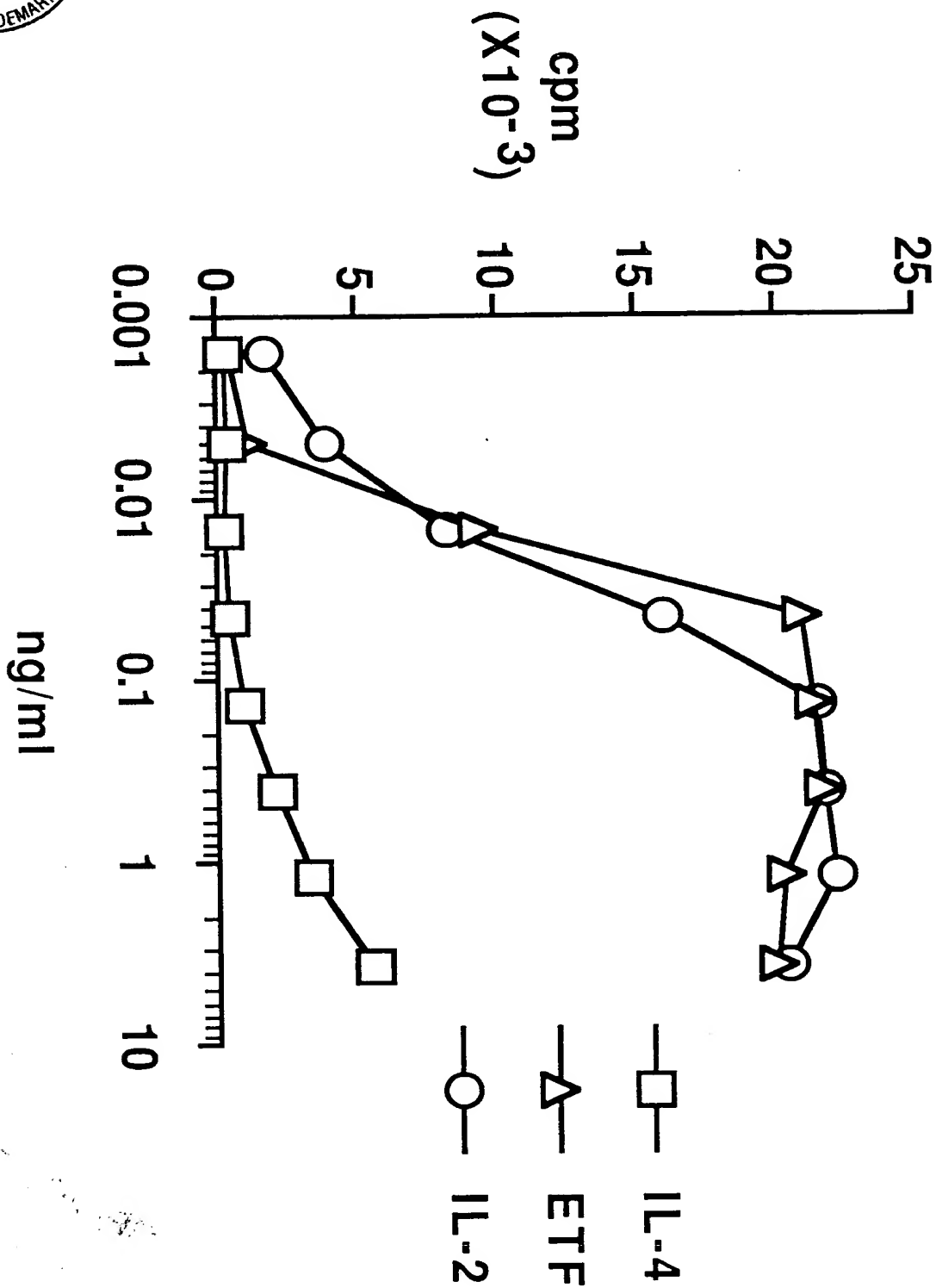
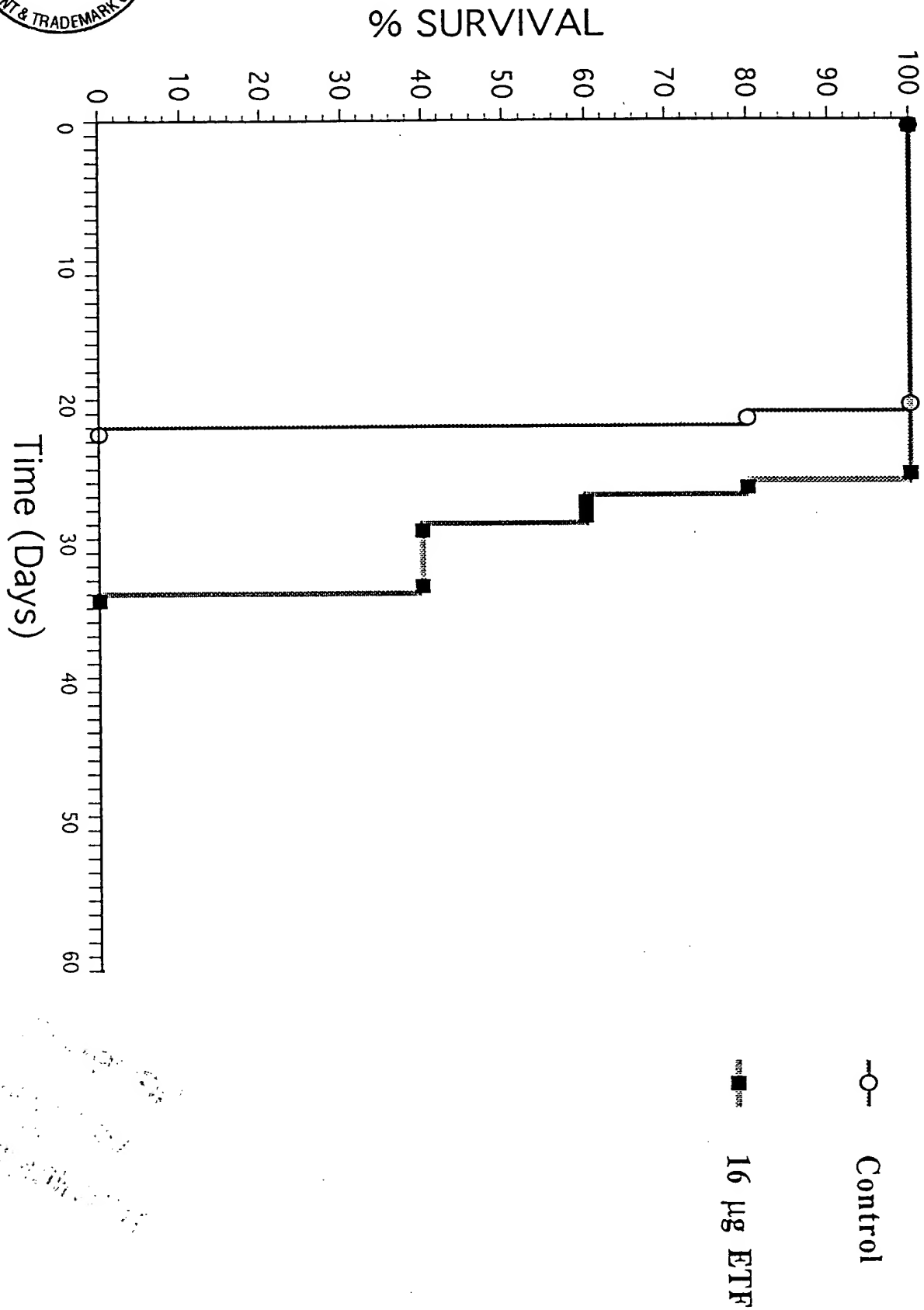


FIGURE 6



FIGURE 7



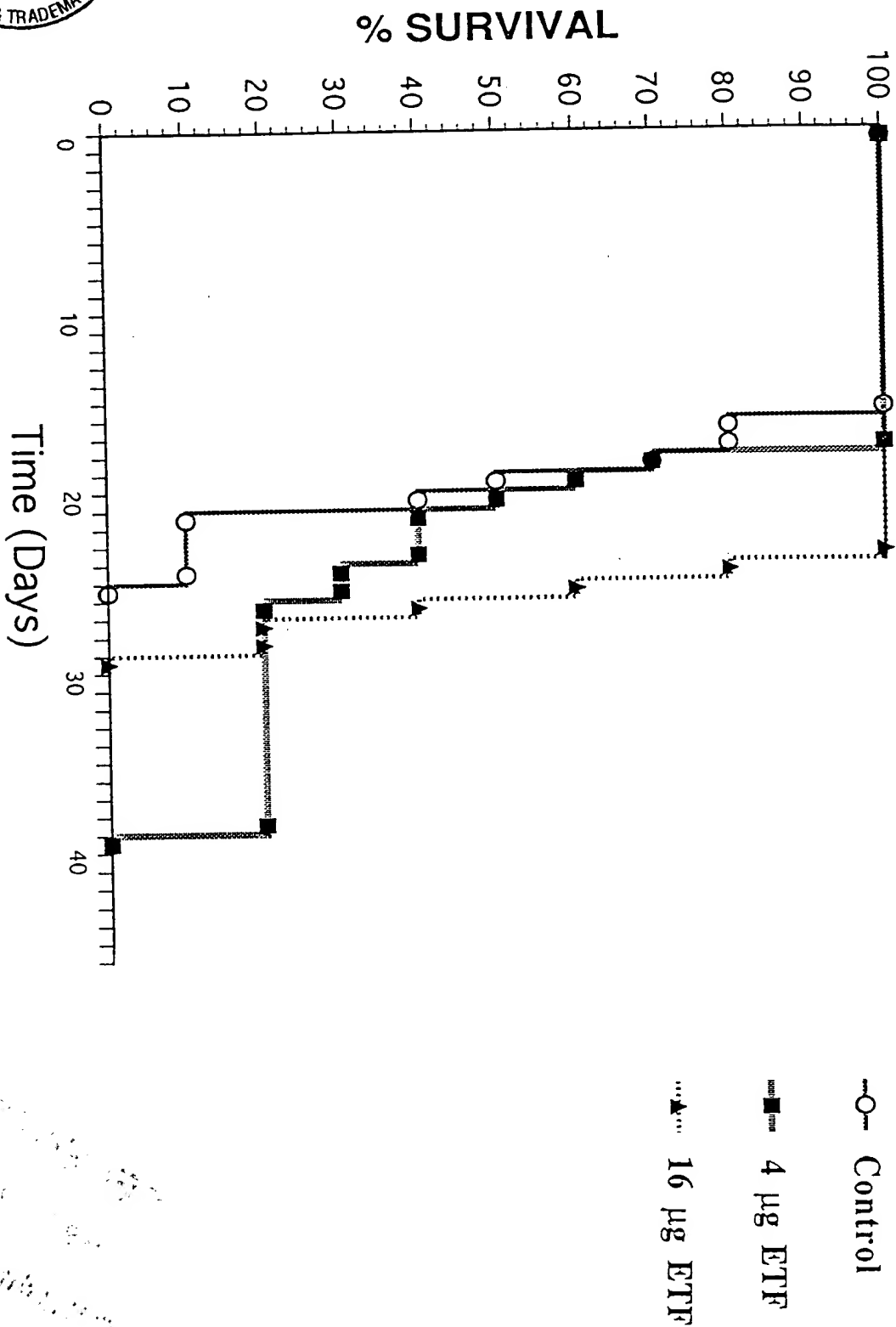


FIGURE 8



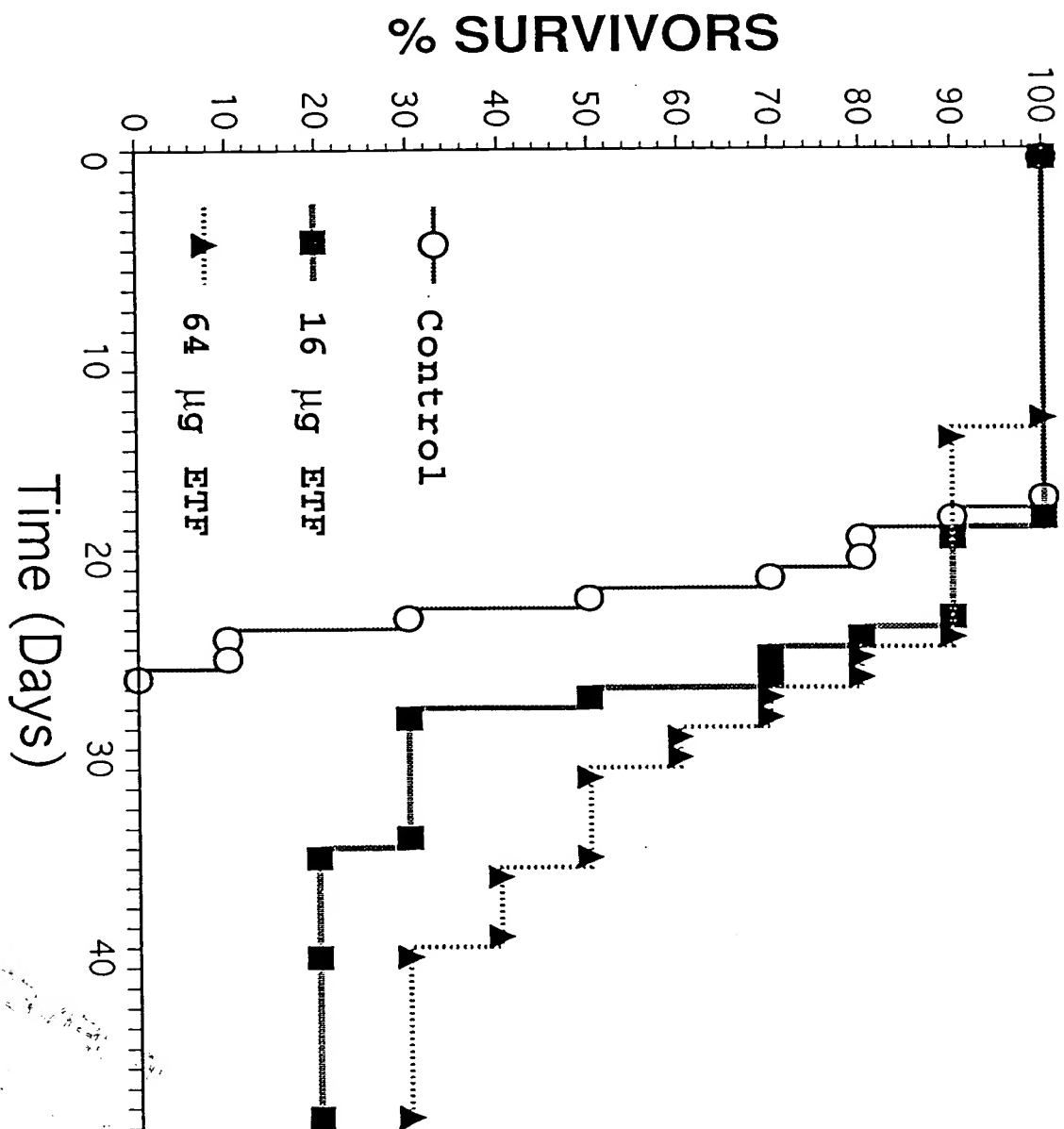


FIGURE 9

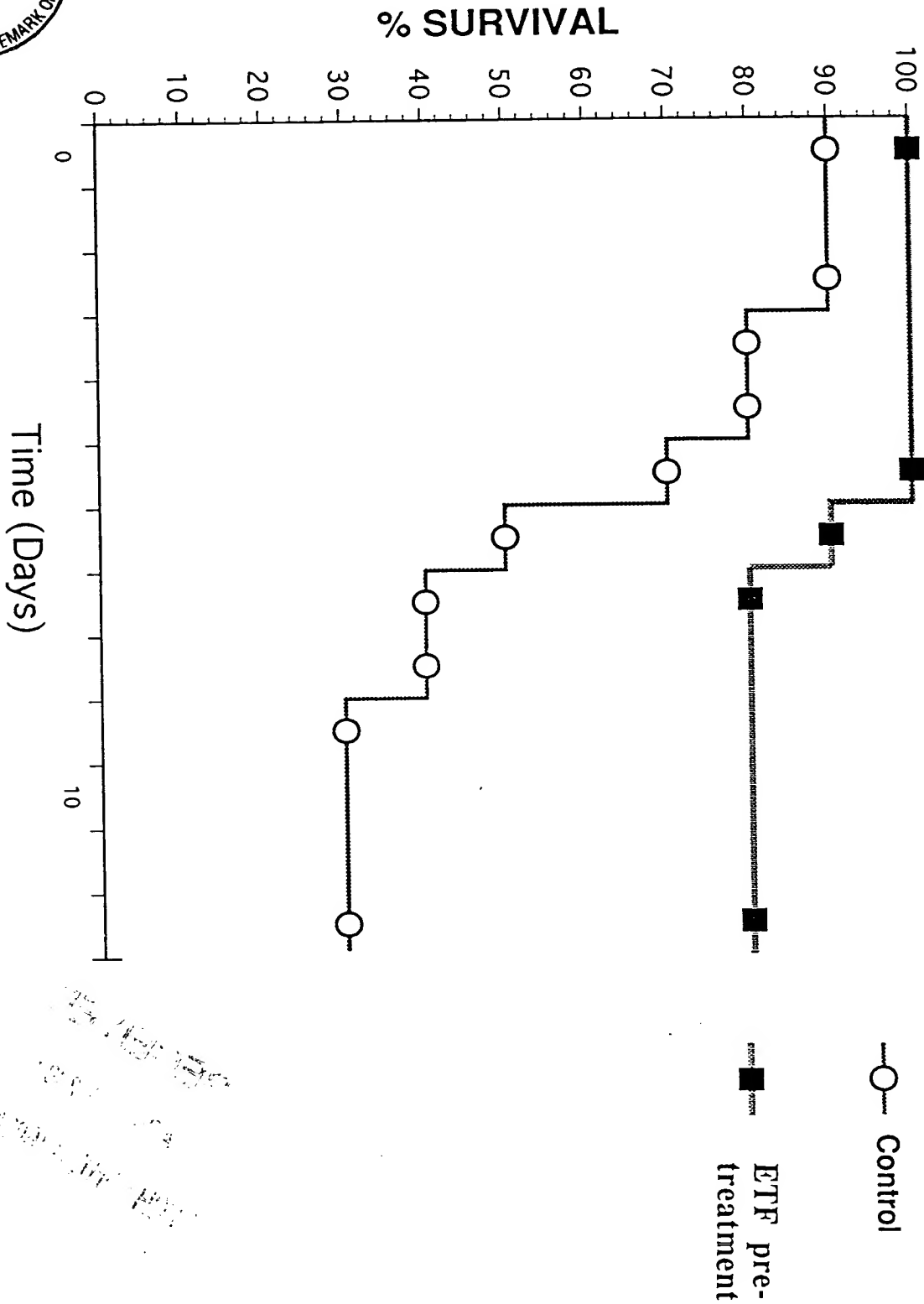


FIGURE 10